

ABSTRACT

[0024] The invention relates to a sensor or a microphone having such a sensor. The object of the present invention is to improve the degree of development of the sensor or an optical microphone as an air-borne sound sensor. A sensor consisting of a diaphragm, wherein at least on one side the diaphragm comprises a surface which reflects a light beam, wherein on this side a first optical waveguide is constructed as a transmitting waveguide, through which a light beam passes and strikes against the diaphragm, wherein a second optical waveguide constructed at a specific angular relationship to the first optical waveguide is provided, which has the function of a receiving waveguide and into which light reflected from the diaphragm enters, an optical element is constructed in the light path between the transmitting waveguide and the receiving waveguide, by which the light beam is bunched or focussed.